IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:

Sabbatino

Serial No.:

10/809,298

For:

A CONNECTION ARRANGEMENT FOR OPTICAL

COMMUNICATION SYSTEMS

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Examiner:

Kaveh C. Kianni

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REPLACEMENT APPEAL BRIEF FILED UNDER 35 U.S.C. §134

Dear Sir:

In response to the request by the Examiner to further clarify the status of the claims, the Replacement Appeal Brief filed herewith under 35 U.S.C. §134 and 37 C.F.R. §41.37 is believed to comply with the requirements set forth in 37 C.F.R. §41.37(c).

(1) Real Party in Interest

The real party in interest is Avago Technologies Fiber IP (Singapore) PTE, LTD. Ownership by Avago is established by assignment document recorded for this application on May 25, 2006 on Reel 017675, Frame 0199.

(2) Related Appeals and Interferences

The undersigned attorney is not aware of any related patent applications or patents involved in any appeal or interference proceeding.

(3) Status of the Claims

Claims 1-4 and 6-9 are pending in the present application. Claim 5 has been cancelled. Claims 3-4 and 6 have been allowed. Claims 1-2 and 7-9 are the subject of this appeal.

Appealed claims 1-2 and 7-9 are directed to the elected embodiment of an arrangement that includes an optical subassembly.

Independent claim 1, as well as dependent claims 2 and 7-9, were finally rejected under 35 U.S.C. §103 over U.S. Publication No. 2004/0145452 A1 to Fujieda et al. (Fujieda). The rejection of claims 1-2 and 7-9 is hereby appealed.

(4) Status of Amendments

No claim amendments after final were made.

(5) Summary of claimed subject matter

The claimed invention relates to connection arrangements for optical communication systems such as fiber optic communication systems.

More particularly, the claimed invention as set forth in finally rejected independent claim 1 advantageously provides an arrangement including an electrical subassembly (18), an optical subassembly (12, 14), and at least electrically non-conductive absorber body (28, 30). The electrical subassembly (18) and the optical subassembly (12, 14) have an associated electrical connection including at least one electrical lead (24, 26) extending therebetween. The at least electrically non-conductive absorber body (28, 30) is arranged to at least partly cover the at least one electrical lead (24, 26). See page 7, lines 8-25.

(6) Grounds of rejection to be reviewed on appeal

The sole issue presented for review is the propriety of the final rejection of claims 1, 2 and 7-9 under 35 U.S.C. §103 over Fujieda

(7) Arguments

Claims 1, 2 and 7-9 stand or fall together. The Final Office Action improperly rejected claims 1, 2 and 7-9 under 35 U.S.C. §103 over Fujieda.

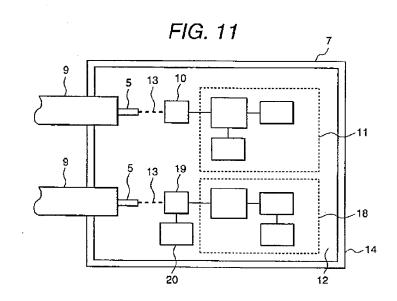
For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention and must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Independent claim 1 requires "an electrical subassembly", "an optical subassembly", and "an associated electrical connection including at least one electrical lead extending therebetween". Further, independent claim 1 requires "at least electrically non-conductive absorber body arranged to at least partly cover said at least one electrical lead (emphasis added)".

Appellant respectfully submits that Fujieda fails to disclose or suggest all elements of claim 1. More particularly, Appellant respectfully submits that Fujieda fails to disclose or suggest an <u>electrically non-conductive</u> absorber body arranged to at least <u>partly cover</u> the at least one electrical lead recited by claim 1.

The Final Office Action asserts, with respect to Figure 11, that the wire extending from laser driver circuit 11 to laser device 10 and the wires extending between circuit 18, PD 19, and element 20 are the claimed "at least one electrical lead".

Figure 11 is reproduced below for the convenience of the Board.



Since claim 1 requires that the "electrically non-conductive absorber body" be "arranged to at least partly cover" the at least one electrical lead, one must look to the disclosure of Fujieda to determine where Fujieda discloses or suggests arranging its electromagnetic wave absorbing layer. The Final Office Action points to paragraphs [0007], [0012], and [0070] to assert that Fujieda teaches the claimed arrangement.

Beginning with paragraph [0007], the Final Office Action asserts that this paragraph discloses that the claimed combination is "widely conventional". Paragraph [0007] is reproduced below for the convenience of the Board:

Under these circumstances, a measure such that <u>a radio wave absorbing</u> <u>material is installed inside an electronic device</u> is typically adopted to reduce EMI that will appear inside the device. One of radio wave absorbing materials so far used is a composite sheet of electrically insulating organic matters, such as rubber and resin, and magnetically lossy material, like soft magnetic metal oxides having spinel crystal structure and soft magnetic metals. These techniques were disclosed by Japanese Patent application laid-open No. 7-212079, 9-111421, 11-354973, 11-16727, etc. (emphasis added).

Thus, paragraph [0007] merely discloses installation of the radio wave absorbing material <u>inside</u> an electronic device. However, this particular section of Fujieda simply does not disclose or suggest the combination claimed where the electrically non-conductive absorber body is arranged <u>to at least partly cover</u> said at least one electrical lead as required by claim 1. Rather, this section of Fujieda is silent as to particular the location or arrangement of the radio wave absorbing material. In contrast, paragraph [0007] merely broadly discloses the use of a radio wave absorbing material inside an electronic device to reduce EMI that will appear inside the device.

Next, Appellant addresses the disclosure of paragraph [0012] in Fujieda. Again, paragraph [0012] is reproduced below for the convenience of the Board:

"The inventors of the present invention found that an electromagnetic wave absorption material comprised of a dispersions of multi-layer hollow globule of carbon mixed into electrical insulating organic material has a far more excellent performance as the electromagnetic wave absorption material available for use in millimeter wave region compared to an electromagnetic wave absorbing material relying on dielectric loss, i.e. a dispersions of carbon-based substance, such as carbon black particulate, graphite, coke, carbon microcoil, and carbon nanotube, mixed into electrical insulating organic material like rubber and resin. Since said multi-layer hollow globule of carbon or a multi-layer hollow globule of carbon existing in a natural schungite ore (hereinafter referred to as a schungite carbon) is contained in natural schungite ore, the use such material for the electromagnetic wave absorption material sees little difficulty. Particularly, the present invention is devised based on the finding that such globule has a high absorption property in millimeter wave region of which frequencies are 30 to 300 GHz."

As can be clearly seen, paragraph [0012] merely discloses the particular electromagnetic wave absorption material disclosed by Fujieda. However, this particular section of Fujieda also does not disclose or suggest the combination claimed where the electrically non-conductive absorber body is arranged to at least partly cover said at least one electrical lead. Rather, this section of Fujieda is also silent as to the location or arrangement of the radio wave absorbing material.

Finally, Appellant addresses the disclosure of paragraph [0070] in Fujieda, which is also reproduced below for the convenience of the Board:

According to the present embodiment, it becomes practicable to provide equipment acceptable for use in a high speed telecommunication network, such as an optical transmission module, an optical reception module, or an optical transmission-reception module composed of an optical transmission unit and an optical reception unit; thanks to their capability rendered from the absorbing material to suppress internal noise interference and noise emission to outside, to achieve small-sizing and weight-reduction, to work under high speed transmission, and to have high sensitivity.

Paragraph [0070] is included under the heading related to "Embodiment 6" as can be seen from the heading between paragraphs [0066] and [0067], which relates to the embodiment of Figure 11 (reproduced herein above). Appellant submits that no portion of paragraph [0070] gives any hint as to the location of the absorbing material with respect to the wires. In fact, Fujieda discloses that, in practice, the configuration of Figure 11 is accompanied by lead-frames and wires, which "are <u>omitted</u> in the figures". See paragraph [0067].

Therefore, Appellant submits that <u>none</u> of the sections highlighted by the Office Action even remotely disclose or suggest the combination claimed where the electrically non-conductive absorber body is <u>arranged to at least partly cover</u> said at least one electrical lead.

In fact, the only portion of Fujieda where a location of the electromagnetic wave absorbing layer is disclosed with respect to the asserted Figure 11 can be found in paragraph [0059]. In paragraph [0059], Fujieda discloses that the electromagnetic wave absorbing layer is <u>arranged inside</u> of metal cap 5. As is clearly seen from Figure 11, metal cap 5 does <u>not</u> "at least partly cover" any of the portions in Figure 11 that are asserted by the Office Action as being electrical leads.

Therefore, it is respectfully submitted that Fujieda simply does not disclose or suggest the at least <u>electrically non-conductive absorber body</u> arranged <u>to at least partly</u> cover said at least one electrical lead" required by claim 1.

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Accordingly, claim 1 is believed to be in condition for allowance. Claims 2 and 7-9 are also believed to be in condition for allowance for at least the reason that they depend from claim 1. Reconsideration and withdrawal of the rejections to claims 1, 2, and 7-9 are therefore respectfully requested.

Summary

In summary, Appellant respectfully requests that the Board of Appeals reverse the final rejections of claims 1, 2 and 7-9, thereby enabling all of the pending claims to be allowed.

Respectfully submitted,

June <u>1</u>, 2007

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(8) Claims Appendix

Claims 1-2 and 7-9, herein on appeal, are set forth below. Claim 5 has been cancelled. Claims 3-4 and 6 have been allowed.

1. An arrangement including:

an electrical subassembly,

an optical subassembly,

said electrical subassembly and said optical subassembly having an associated electrical connection including at least one electrical lead extending therebetween, and

at least electrically non-conductive absorber body arranged to at least partly cover said at least one electrical lead.

- 2. The arrangement of claim 1, wherein said associated electrical connection includes a lead frame comprising a plurality of said at least one electrical leads, said absorber body arranged to extend over said lead frame.
- 7. The arrangement of claim 1, wherein said absorber body is selected out of the group consisting of magnetically loaded, iron loaded, ferrite loaded or dielectrically loaded materials.
- 8. The arrangement of claim 1, wherein said absorber body is comprised of a material selected from the group consisting of silicon, urethane, vinyl plastic and silicon rubber.
- 9. The arrangement of claim 1, wherein said absorber body is in the form of a sheet material.

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None.

(10) Related Proceedings Appendix

None.